Response and Amendment under 37 CFR § 1.111 Application No. 10/695,644 Page 2 of 11

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1-2. (Cancelled)
- 3. (Previously Amended) A compound of Formula (I), Formula (IV) or Formula (V), a stereoisomer thereof or a pharmaceutically acceptable salt thereof:

wherein the compound of Formula (I) is:

$$\underbrace{ \begin{array}{c} OD \\ D_1 \\ N \end{array} }_{I}$$

wherein:

D is hydrogen, Q, K or R₅;

R₅ is:

$$OD_2$$
 OD_2
 OD_2
 OD_2
 OD_2

D₁ is hydrogen or R₅;

D₂ is hydrogen, Q or K;

Q is -NO or $-NO_2$;

 $\text{K is -W_a-E_b-}(C(R_e)(R_f))_p - \text{E_c-}(C(R_e)(R_f))_x - \text{W_d-}(C(R_e)(R_f))_y - \text{W_i-E_j-W_g-}(C(R_e)(R_f))_z - \text{T-Q};$

a, b, c, d, g, i and j are each independently an integer from 0 to 3;

Response and Amendment under 37 CFR § 1.111 Application No. 10/695,644 Page 3 of 11

p, x, y and z are each independently an integer from 0 to 10;

W at each occurrence is independently -C(O)-, -C(S)-, -T-, -(C(R_e)(R_f))_h-, an alkyl group, an aryl group, a heterocyclic ring, an arylheterocyclic ring, or -(CH₂CH₂O)_q-;

E at each occurrence is independently -T-, an alkyl group, an aryl group, - $(C(R_e)(R_f))_{h^-}$, a heterocyclic ring, an arylheterocyclic ring, or - $(CH_2CH_2O)_{q^-}$;

h is an integer form 1 to 10;

q is an integer from 1 to 5;

 R_e and R_f are each independently a hydrogen, an alkyl, a cycloalkoxy, a halogen, a hydroxy, an hydroxyalkyl, an alkoxyalkyl, an arylheterocyclic ring, an alkylaryl, an alkylcycloalkyl, an alkylheterocyclic ring, a cycloalkylalkyl, a cycloalkylthio, a cycloalkenyl, an heterocyclicalkyl, an alkoxy, a haloalkoxy, an amino, an alkylamino, a dialkylamino, an arylamino, a diarylamino, an alkylarylamino, an alkoxyhaloalkyl, a haloalkoxy, a sulfonic acid, a sulfonic ester, an alkylsulfonic acid, an arylsulfonic acid, an arylalkoxy, an alkylthio, an arylthio, a cyano an aminoalkyl, an aminoaryl, an aryl, an arylalkyl, an alkylaryl, a carboxamido, a alkylcarboxamido, an arylcarboxamido, an amidyl, a carboxyl, a carbamoyl, an alkylcarboxylic acid, an arylcarboxylic ester, an arylcarboxylic ester, a haloalkoxy, a sulfonamido, an alkylsulfonamido, an arylsulfonamido, an alkylsulfonyl, an alkylsulfonyloxy, a sulfonic ester, a urea, a phosphoryl, a nitro, W_h , -T-Q, or -($C(R_e)(R_f))_k$ -T-Q, or R_e and R_f taken together with the carbons to which they are attached form a carbonyl, a methanthial, a heterocyclic ring, a cycloalkyl group, an aryl group, an oxime or a bridged cycloalkyl group;

k is an integer from 1 to 3;

T at each occurrence is independently a covalent bond, a carbonyl, an oxygen, $-S(O)_o\text{- or -}N(R_a)R_i\text{-};$

o is an integer from 0 to 2;

R_a is a lone pair of electrons, a hydrogen or an alkyl group;

 R_i is a hydrogen, an alkyl, an aryl, an alkylcarboxylic acid, an arylcarboxylic acid, an alkylcarboxylic ester, an alkylcarboxamido, an arylcarboxamido, an alkylsulfinyl, an alkylsulfonyl, an alkylsulfonyl, an arylsulfinyl, an arylsulfonyl, arylsulphonyloxy, a sulfonamido, a carboxamido, a carboxylic ester, an aminoalkyl, an

Response and Amendment under 37 CFR § 1.111 Application No. 10/695,644 Page 4 of 11

aminoaryl, $-CH_2-C(T-Q)(R_e)(R_f)$, a bond to an adjacent atom creating a double bond to that atom, $-(N_2O_2-)^{-1}M^+$, wherein M^+ is an organic or inorganic cation;

with the proviso that the compound of Formula (I) must contain at least one nitrite, nitrate, thionitrite or thionitrate group;

wherein the compounds of Formula (IV) and Formula (V) are:

$$\begin{array}{c|c} & & & & & & & & & & \\ \hline R_6 & & & & & & & & \\ \hline F & & & & & & & \\ \hline IV & & & & & & \\ \end{array}$$

wherein:

R₆ at each occurrence is independently a hydrogen, a hydroxy or -OD;

D and D_1 are as defined herein; and with the proviso that the compounds of Formula (IV) and Formula (V), must contain at least one nitrite, nitrate, thionitrite or thionitrate group.

4. (Previously Amended) The compound of claim 3, wherein the compound of Formula (I) is a nitrosated nebivolol, a nitrosylated nebivolol, or a nitrosated and nitrosylated nebivolol, wherein the compounds of Formula (IV) and Formula (V) are a nitrosated metabolite

of nebivolol, a nitrosylated metabolite of nebivolol, or a nitrosated and nitrosylated metabolite of nebivolol.

- 5. (Original) A composition comprising the compound of claim 3 and a pharmaceutically acceptable carrier.
- 6. (Previously Amended) A method of treating hypertension in a patient in need thereof comprising administering a therapeutically effective amount of the composition of claim 5.

7-10. (Cancelled)

11. (Original) The method of claim 6, wherein the composition is administered intravenously, orally, bucally, parenterally, by an inhalation spray, by topical application or transdermally.

12-73. (Cancelled)

74. (Previously Amended) A composition comprising at least one compound of Formula (I), Formula (IV) or Formula (V), or an isomer thereof, or a pharmaceutically acceptable salt thereof, bound to a matrix;

wherein the matrix is a polymer, a fiber, or a mixture thereof; and wherein the compound of Formula (I) is:

$$\begin{array}{c|c} & OD & D_1 & OD \\ \hline & N & \\ \hline & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

Ι

wherein:

D is hydrogen, Q, K or R₅;

 R_5 is:

Response and Amendment under 37 CFR § 1.111 Application No. 10/695,644 Page 6 of 11

D₁ is hydrogen or R₅;

D₂ is hydrogen, Q or K;

Q is -NO or $-NO_2$;

 $K \text{ is } -W_a - E_b - (C(R_e)(R_f))_p - E_c - (C(R_e)(R_f))_x - W_d - (C(R_e)(R_f))_y - W_i - E_j - W_g - (C(R_e)(R_f))_z - T - Q;$

a, b, c, d, g, i and j are each independently an integer from 0 to 3;

p, x, y and z are each independently an integer from 0 to 10;

W at each occurrence is independently -C(O)-, -C(S)-, -T-, -(C(R_e)(R_f))_h-, an alkyl group, an aryl group, a heterocyclic ring, an arylheterocyclic ring, or -(CH₂CH₂O)_q-;

E at each occurrence is independently -T-, an alkyl group, an aryl group, - $(C(R_e)(R_f))_{h}$ -, a heterocyclic ring, an arylheterocyclic ring, or - $(CH_2CH_2O)_{q}$ -;

h is an integer form 1 to 10;

q is an integer from 1 to 5;

R_e and R_f are each independently a hydrogen, an alkyl, a cycloalkoxy, a halogen, a hydroxy, an hydroxyalkyl, an alkoxyalkyl, an arylheterocyclic ring, an alkylaryl, an alkylcycloalkyl, an alkylheterocyclic ring, a cycloalkylalkyl, a cycloalkylthio, a cycloalkenyl, an heterocyclicalkyl, an alkoxy, a haloalkoxy, an amino, an alkylamino, a dialkylamino, an arylamino, a diarylamino, an alkylarylamino, an alkoxyhaloalkyl, a haloalkoxy, a sulfonic acid, a sulfonic ester, an alkylsulfonic acid, an arylsulfonic acid, an arylalkoxy, an alkylthio, an arylthio, a cyano an aminoalkyl, an aminoaryl, an aryl, an arylalkyl, an alkylaryl, a carboxamido, a alkylcarboxamido, an arylcarboxamido, an anidyl, a carboxyl, a carbamoyl, an alkylcarboxylic acid, an alkylcarbonyl, an arylcarbonyl, an ester, a carboxylic ester, an

alkylcarboxylic ester, an arylcarboxylic ester, a haloalkoxy, a sulfonamido, an alkylsulfonamido, an arylsulfonamido, an alkylsulfonyl, an alkylsulfonyloxy, an arylsulfonyl, arylsulphonyloxy, a sulfonic ester, a urea, a phosphoryl, a nitro, W_h , -T-Q, or -($C(R_e)(R_f)$)_k-T-Q, or R_e and R_f taken together with the carbons to which they are attached form a carbonyl, a methanthial, a heterocyclic ring, a cycloalkyl group, an aryl group, an oxime or a bridged cycloalkyl group;

k is an integer from 1 to 3;

T at each occurrence is independently a covalent bond, a carbonyl, an oxygen, $-S(O)_0$ - or $-N(R_a)R_i$ -;

o is an integer from 0 to 2;

R_a is a lone pair of electrons, a hydrogen or an alkyl group;

 R_i is a hydrogen, an alkyl, an aryl, an alkylcarboxylic acid, an arylcarboxylic acid, an alkylcarboxylic ester, an arylcarboxylic ester, an alkylcarboxamido, an arylcarboxamido, an alkylaryl, an alkylsulfinyl, an alkylsulfonyl, an alkylsulfonyloxy, an arylsulfinyl, an arylsulfonyl, arylsulphonyloxy, a sulfonamido, a carboxamido, a carboxylic ester, an aminoalkyl, an aminoaryl, $-CH_2-C(T-Q)(R_e)(R_f)$, a bond to an adjacent atom creating a double bond to that atom, $-(N_2O_2-)^{-\bullet}M^+$, wherein M^+ is an organic or inorganic cation;

with the proviso that the compound of Formula (I) must contain at least one nitrite, nitrate, thionitrite or thionitrate group;

wherein the compounds of Formula (IV) and Formula (V) are:

$$\begin{array}{c|c} & & & & & & & & & & \\ \hline R_6 & & & & & & & & \\ \hline F & & & & & & & \\ \hline \end{array}$$

Response and Amendment under 37 CFR § 1.111 Application No. 10/695,644 Page 8 of 11

wherein:

R₆ at each occurrence is independently a hydrogen, a hydroxy or -OD;

D and D₁ is as defined herein; and

with the proviso that the compounds of Formula (IV) and Formula (V), must contain at least one nitrite, nitrate, thionitrite or thionitrate group.

75. (Original) The composition of claim 74, wherein the polymer is a synthetic polymer or a natural polymer selected from a polyolefin, a polyethylenimine, a polyethyleneimine derivative, a polyether, a polyamydride, a polyhydroxybutyrate, a polyester, a polyamide, a polyurethane, a biopolymer, a starburst dendrimer, or a mixture thereof.

76- 79 (Cancelled)

- 80. (Currently Amended) A medical device comprising the composition of claim 74 or 76, wherein the medical device is a balloon, a catheter tip, a stent, a catheter, a prosthetic heart valve, a synthetic vessel graft, an arteriovenous shunt, a heart valve, a suture, a vascular implant, a drug pump, a drug delivery catheter, plastic tubing, a dialysis bag, a lead, a pacemaker, an implantable pulse generator, an implantable cardiac defibrillator, a cardioverter defibrillator, a defibrillator, a spinal stimulator, a brain stimulator, a sacral nerve stimulator, a chemical sensor or a membrane surface.
- 81. (Previously Amended) The medical device of claim 80, wherein the composition coats all or a portion of the surface of the medical device.
- 82. (Original) The medical device of claim 80, wherein the composition forms all or part of the medical device.

83 –108. (Cancelled)